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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,771	03/08/2005	Rikuo Onishi	HEIW:046	5849

7590 11/07/2005
Parkhurst & Wendel
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EXAMINER

WU, IVES J

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/526,771

Applicant(s)

ONISHI ET AL.

Examiner

Ives Wu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/8/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

(1). Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it recites: “(4) the content of components having a Mw of 10,000 or less is 5 wt% or less”. The phrase “content of components” is unclear as to what components it referring to. Therefore, it renders indefinite scope of the invention. ✓

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(2). **Claims 1-9** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okada et al (US005093404A).

(3). Okada et al (US005093404A) disclose a modified polypropylene resin composition (Title), which comprises compound of a polypropylene and modified polypropylene by grafting unsaturated carboxylic acid or a derivative thereof and an unsaturated aromatic monomer onto a polypropylene, a saturated polyester resin, basic compound, epoxy group containing copolymer (Abstract). In the patentee's invention, an ethylenic copolymer rubber is included (Col. 12, line 48-49). The filler can be blended for reinforcement, impartment of functions, extension (reduction of the cost), etc. The filler can be inorganic fillers such as silica, mica, clay etc. (Col. 15, line 46-55).

The polypropylene is a crystalline one and includes, for example, propylene homopolymer; block copolymers obtained by polymerizing propylene at the 1st step and copolymerizing the resulting polypropylene with ethylene and at least one α -olefin such as butane-1 at 2nd step (Col. 3, line 45-52).

In producing the modified polypropylene (A), the melt flow rate of a starting polypropylene (a crystalline propylene homopolymer, a crystalline propylene-ethylene/ α -olefin block copolymer, a crystalline propylene- α -olefin random copolymer, or the like) is 0.05 – 60 g/10 min, the melt flow rate of resulting modified polypropylene (A) is 0.5 – 50 g/10 min, the number average molecular weight of starting polypropylene is 7,000 to 800,000.

The amount of the unsaturated carboxylic acid or derivative thereof is preferably 0.01 to 10 parts by wt (Col. 9, line 68 – Col. 10, line 2).

For grafting the graft monomers on a polypropylene, various conventional methods can be employed. For example, a method comprising mixing polypropylene, graft monomers and a radical generating agent followed by melt-kneading the resulting mixture in a melt-kneading apparatus to graft the graft monomers (Col. 8, line 17-23) at temperature of 150 – 300 °C by means of an extruder, Banbury mixer, Kneader, etc (Col. 8, line 41-44).

A method for producing the modified polypropylene resin composition is not critical and conventional methods can be used (Col. 17, line 44-46). Although a method comprising mixing the starting materials in solution followed by evaporation of the solvent or precipitation, a method comprising kneading the starting materials in molten state is employed in practice from an industrial viewpoint. For the melt-kneading, there can be Banbury mixer, extruder, roll mill, various kneaders, etc (Col.17, line 44-60).

As to the content of polar group moieties resulting from a compound containing an ethylenic double bond and a polar group from 0.1 to 0.3 mmol/g in **independent claim 1**, Okada et al disclose the amount of unsaturated carboxylic acids or derivative thereof is preferably 0.01 to 10 parts by wt (Col. 9, line 68 – Col. 10, line 2).

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As to the intrinsic viscosity and content of components in modified propylene based polymer in **independent claim 1**, and ratio of intrinsic viscosity of modified propylene based polymer to intrinsic viscosity of propylene based polymer to be 0.2 or more in **dependent claim 2**, in view of substantially identical modified propylene based composition, process disclosed by applicant and by Okada et al, it is the examiner's position to believe that the modified propylene based resin composition of Okada et al would inherently possess these properties such as intrinsic viscosity, ratio, molecular weight distribution. Since USPTO does not have proper means to conduct the experiments, the burden now is shifted to the applicants to prove otherwise. *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Ives Wu

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Date: October 31, 2005



DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700